

District I  
1625 N. French Dr., Hobbs, NM 88240  
District II  
1301 W. Grand Avenue, Artesia, NM 88210  
District III  
1000 Rio Brazos Road, Aztec, NM 87410  
District IV  
1220 S. St. Francis Dr., Santa Fe, NM 87505

State of New Mexico  
Energy Minerals and Natural Resources

Form C-101  
May 27, 2004

Oil Conservation Division  
1220 South St. Francis Dr.  
Santa Fe, NM 87505

Submit to appropriate District Office

☐ AMENDED REPORT

**APPLICATION FOR PERMIT TO DRILL, RE-ENTER, DEEPEN, PLUGBACK, OR ADD A ZONE**

|   |  |  |
|---|--|--|
| <sup>1</sup> Operator Name and Address<br><b>Threshold Development Company<br/>777 Taylor Street - Penthouse II-D<br/>Fort Worth, Texas 76102</b> |  | <sup>2</sup> OGRID Number<br><b>23032</b>          |
| <sup>3</sup> Property Code  | <sup>5</sup> Property Name<br><b>TDC State Section 8</b> | <sup>4</sup> API Number<br><b>30 - 015 - 33697</b> |
| <sup>9</sup> Proposed Pool 1<br><b>Millman-Yates-Seven Rivers-Queen-Grayburg-San Andres</b>   |  | <sup>6</sup> Well No.<br><b>5</b>                  |
| <sup>10</sup> Proposed Pool 2   |  |  |

<sup>7</sup> Surface Location

|                           |                     |                        |                      |         |                             |                                  |                              |                               |                       |
|---------------------------|---------------------|------------------------|----------------------|---------|-----------------------------|----------------------------------|------------------------------|-------------------------------|-----------------------|
| UL or lot no.<br><b>C</b> | Section<br><b>8</b> | Township<br><b>19S</b> | Range<br><b>29 E</b> | Lot Idn | Feet from the<br><b>990</b> | North/South line<br><b>North</b> | Feet from the<br><b>1650</b> | East/West line<br><b>West</b> | County<br><b>Eddy</b> |
|---------------------------|---------------------|------------------------|----------------------|---------|-----------------------------|----------------------------------|------------------------------|-------------------------------|-----------------------|

<sup>8</sup> Proposed Bottom Hole Location If Different From Surface

|               |         |          |       |         |               |                  |               |                |        |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| UL or lot no. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|

**Additional Well Information**

|   |  |  |  |  |
|---|--|--|--|--|
| <sup>11</sup> Work Type Code<br><b>N</b>  | <sup>12</sup> Well Type Code<br><b>O</b>             | <sup>13</sup> Cable/Rotary<br><b>Rotary</b>          | <sup>14</sup> Lease Type Code<br><b>S</b>          | <sup>15</sup> Ground Level Elevation<br><b>3388'</b> |
| <sup>16</sup> Multiple<br><b>No</b>   | <sup>17</sup> Proposed Depth<br><b>Approx. 3000'</b> | <sup>18</sup> Formation<br><b>Queen-GB-SA</b>        | <sup>19</sup> Contractor<br><b>United Drilling</b> | <sup>20</sup> Spud Date<br><b>Nov 22, 2004</b>       |
| Depth to Groundwater <b>NA</b>  |  | Distance from nearest fresh water well <b>+ 2 mi</b> |  | Distance from nearest surface water <b>+ 2 mi</b>    |
| Pit: Liner: Synthetic X <u>12</u> mils thick Clay <input type="checkbox"/> Pit Volume: <u>400</u> bbls (Steel) Drilling Method:<br>Closed-Loop System <input type="checkbox"/> Fresh Water X Brine X Diesel/Oil-based <input type="checkbox"/> Gas/Air <input type="checkbox"/> |  |  |  |  |

<sup>21</sup> Proposed Casing and Cement Program

| Hole Size     | Casing Size   | Casing weight/foot | Setting Depth        | Sacks of Cement  | Estimated TOC    |
|---------------|---------------|--------------------|----------------------|------------------|------------------|
| <b>11"</b>    | <b>8-5/8"</b> | <b>24#</b>         | <b>Approx. 300'</b>  | <b>350 Sacks</b> | <b>Circulate</b> |
| <b>7-7/8"</b> | <b>5-1/2"</b> | <b>10.5#</b>       | <b>Approx. 3000'</b> | <b>800 Sacks</b> | <b>Circulate</b> |
|               |               |                    |                      |                  |                  |
|               |               |                    |                      |                  |                  |
|               |               |                    |                      |                  |                  |

<sup>22</sup> Describe the proposed program. If this application is to DEEPEN or PLUG BACK, give the data on the present productive zone and proposed new productive zone. Describe the blowout prevention program, if any. Use additional sheets if necessary.

Threshold Development Company proposes to drill and test the Queen and intermediate formations. If productive, casing will be set and cemented and zones of interest will be perforated and stimulated as needed for production.

MUD PROGRAM: Fresh water from surface to 300'; cut brine to TD  
BOP PROGRAM: 3K Shafer, blind and pipe rams

GAS NOT DEDICATED

RECEIVED

OCT 28 2004

DOB-ARTESIA

<sup>23</sup> I hereby certify that the information given above is true and complete to the best of my knowledge and belief. I further certify that the drilling pit will be constructed according to NMOCD guidelines X, a general permit ☐, or an (attached) alternative OCD-approved plan ☐.

Signature: *Linda Brown*

Printed name: Linda Brown

Title: Regulatory Analyst

E-mail Address: lbrown@thresholddevelopment.com

Date: 10/27/04

Phone: 817-870-1483

**OIL CONSERVATION DIVISION**

Approved by:

**TIM W. GUM**

**DISTRICT II SUPERVISOR**

Approval Date: **OCT 29 2004**

Expiration Date: **OCT 29 2005**

Conditions of Approval Attached ☐

DISTRICT I  
1625 N. French Dr., Hobbs, NM 88240  
DISTRICT II  
811 South First, Artesia, NM 88210  
DISTRICT III  
1000 Rio Brazos Rd., Aztec, NM 87410  
DISTRICT IV  
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico  
Energy, Minerals and Natural Resources Department

Form C-102  
Revised March 17, 1999

Submit to Appropriate District Office  
State Lease - 4 Copies  
Fee Lease - 3 Copies

OIL CONSERVATION DIVISION

2040 South Pacheco  
Santa Fe, New Mexico 87505

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

|                    |  |                    |
|--------------------|--|--------------------|
| API Number         | Pool Code  | Pool Name          |
| Property Code      | Property Name<br>TDC STATE SECTION 8               | Well Number<br>5   |
| OGRID No.<br>23032 | Operator Name<br>THRESHOLD DEVELOPMENT CORPORATION | Elevation<br>3388' |

Surface Location

|               |         |          |       |         |               |                  |               |                |        |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
| C             | 8       | 19 S     | 29 E  |         | 990           | NORTH            | 1650          | WEST           | EDDY   |

Bottom Hole Location If Different From Surface

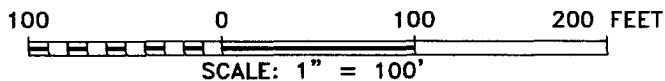
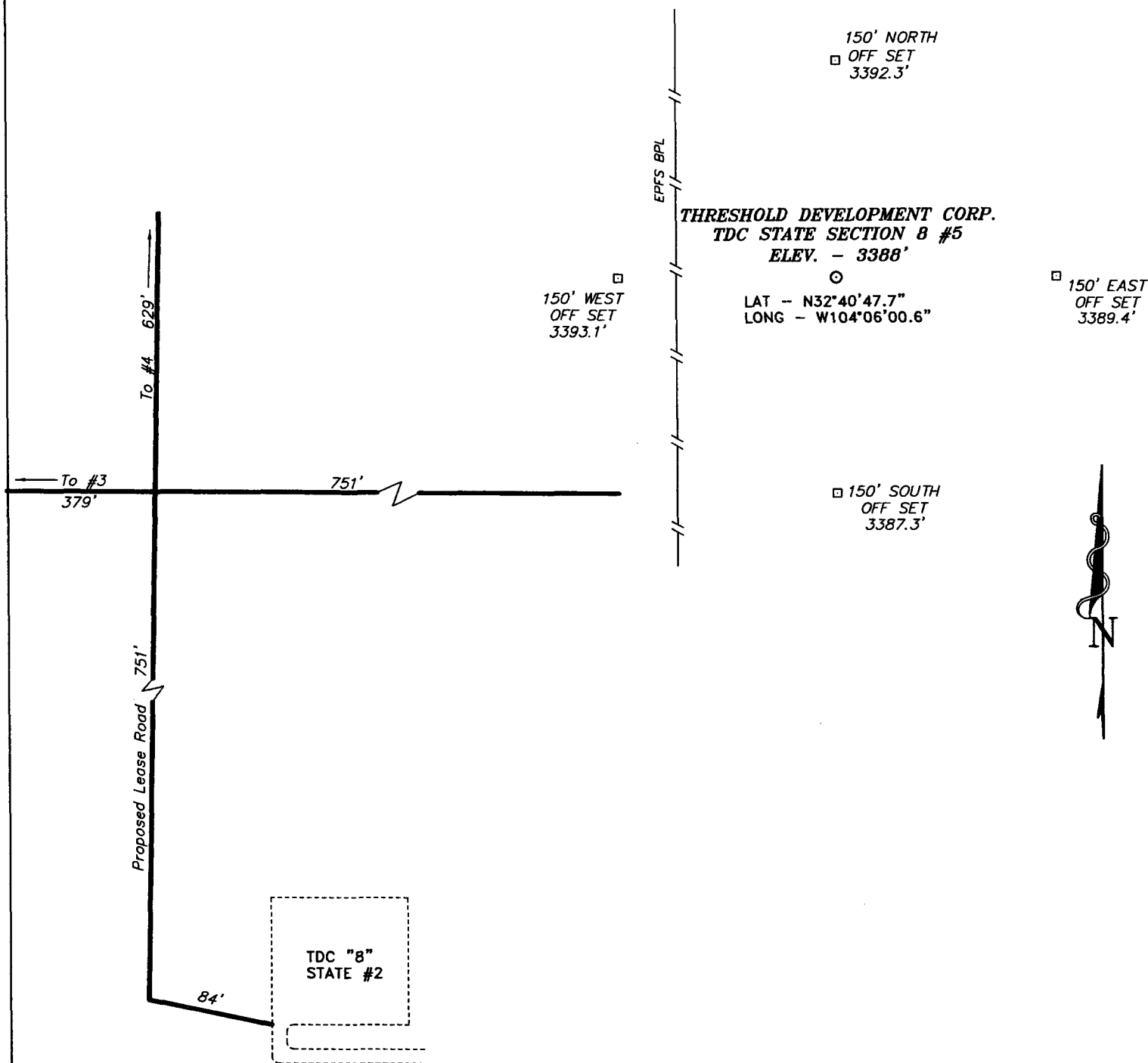
|               |         |          |       |         |               |                  |               |                |        |
|---------------|---------|----------|-------|---------|---------------|------------------|---------------|----------------|--------|
| UL or lot No. | Section | Township | Range | Lot Idn | Feet from the | North/South line | Feet from the | East/West line | County |
|               |         |          |       |         |               |                  |               |                |        |

|                       |                 |                    |           |
|-----------------------|-----------------|--------------------|-----------|
| Dedicated Acres<br>40 | Joint or Infill | Consolidation Code | Order No. |
|-----------------------|-----------------|--------------------|-----------|

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED  
OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

|  |  |
|--|--|
|  | <p><b>OPERATOR CERTIFICATION</b></p> <p>I hereby certify the the information contained herein is true and complete to the best of my knowledge and belief.</p> <p><i>Morris Keith</i><br/>Signature<br/>MORRIS KEITH<br/>Printed Name<br/>OPERATIONS MANAGER<br/>Title<br/>10-19-04<br/>Date</p> <p><b>SURVEYOR CERTIFICATION</b></p> <p>I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my belief.</p> <p>OCTOBER 11, 2004<br/>Date Surveyed<br/>Signature &amp; Seal of<br/>Professional Surveyor<br/>W.O. No. 4777<br/>Certificate No. Gary L. Jones 7977<br/>PROFESSIONAL LAND SURVEYOR</p> |
|--|--|

SECTION 8, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M.,  
EDDY COUNTY, NEW MEXICO.



DIRECTIONS:

FROM THE JUNCTION OF CO. RD. 210 AND 235, GO WEST ON 235 FOR 1.0 MILE TO LEASE ROAD; THENCE NORTH ON LEASE ROAD FOR 1.4 MILE; THENCE WEST FOR 0.2 MILE TO TDC "8" STATE #2 AND PROPOSED LEASE ROAD.

**BASIN SURVEYS** P.O. BOX 1786-HOBBS, NEW MEXICO

W.O. Number: 4727 Drawn By: K. GOAD

DATE: 10-15-2004 Disk: KJG CD#6 - 4727A.DWG

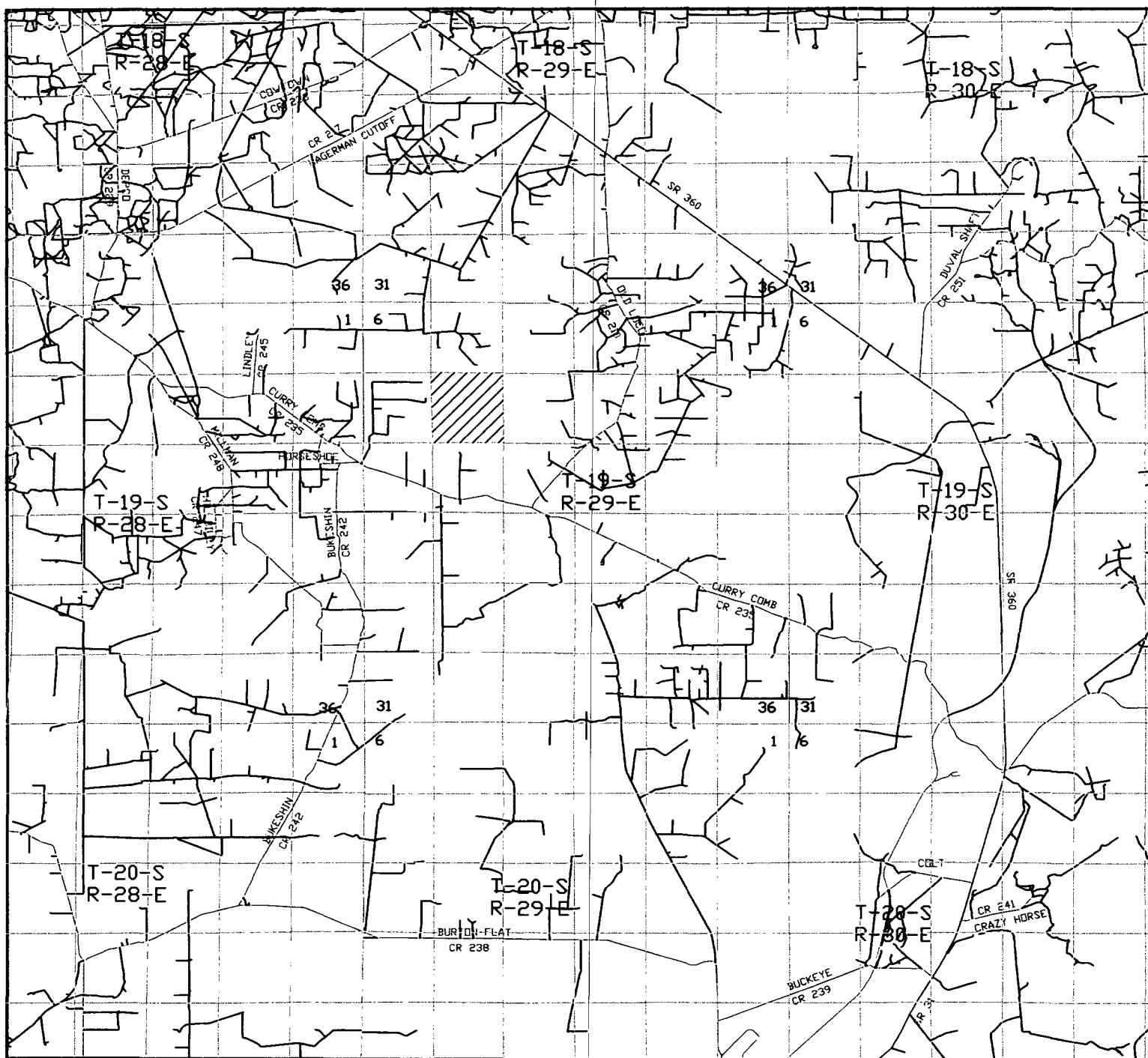
**THRESHOLD DEVELOPMENT CORP.**

REF: TDC STATE SECTION 8 No. 5 / Well Pad Topo

THE TDC STATE SECTION 8 No. 5 LOCATED 990' FROM THE NORTH LINE AND 1650' FROM THE WEST LINE OF SECTION 8, TOWNSHIP 19 SOUTH, RANGE 29 EAST, N.M.P.M., EDDY COUNTY, NEW MEXICO.

Survey Date: 10-11-2004 Sheet 1 of 1 Sheets





**TDC STATE SECTION 8 #5**  
 Located at 990' FNL and 1650' FWL  
 Section 8, Township 19 South, Range 29 East,  
 N.M.P.M., Eddy County, New Mexico.

**basin**  
**surveys**  
 focused on excellence  
 in the oilfield

P.O. Box 1786  
 1120 N. West County Rd.  
 Hobbs, New Mexico 88241  
 (505) 393-7316 - Office  
 (505) 392-3074 - Fax  
 basinsurveys.com

W.O. Number: 4727AA - KJG CD#5

Survey Date: 10-11-2004

Scale: 1" = 2 MILES

Date: 10-15-2004

**THRESHOLD**  
**DEVELOPEMENT**  
**COMPANY**

# Threshold Development Co.

**777 Taylor Street**

## P II Suite D

**Fort Worth TX 76102**

# Hydrogen Sulfide (H<sub>2</sub>S) Contingency Plan

# For

## TDC STATE SECTION 8

## Well # 3 990' FNL & 330' FWL

## Well # 4 330' FNL & 990' FWL

**Well # 5 990' FNL & 1650' FWL**

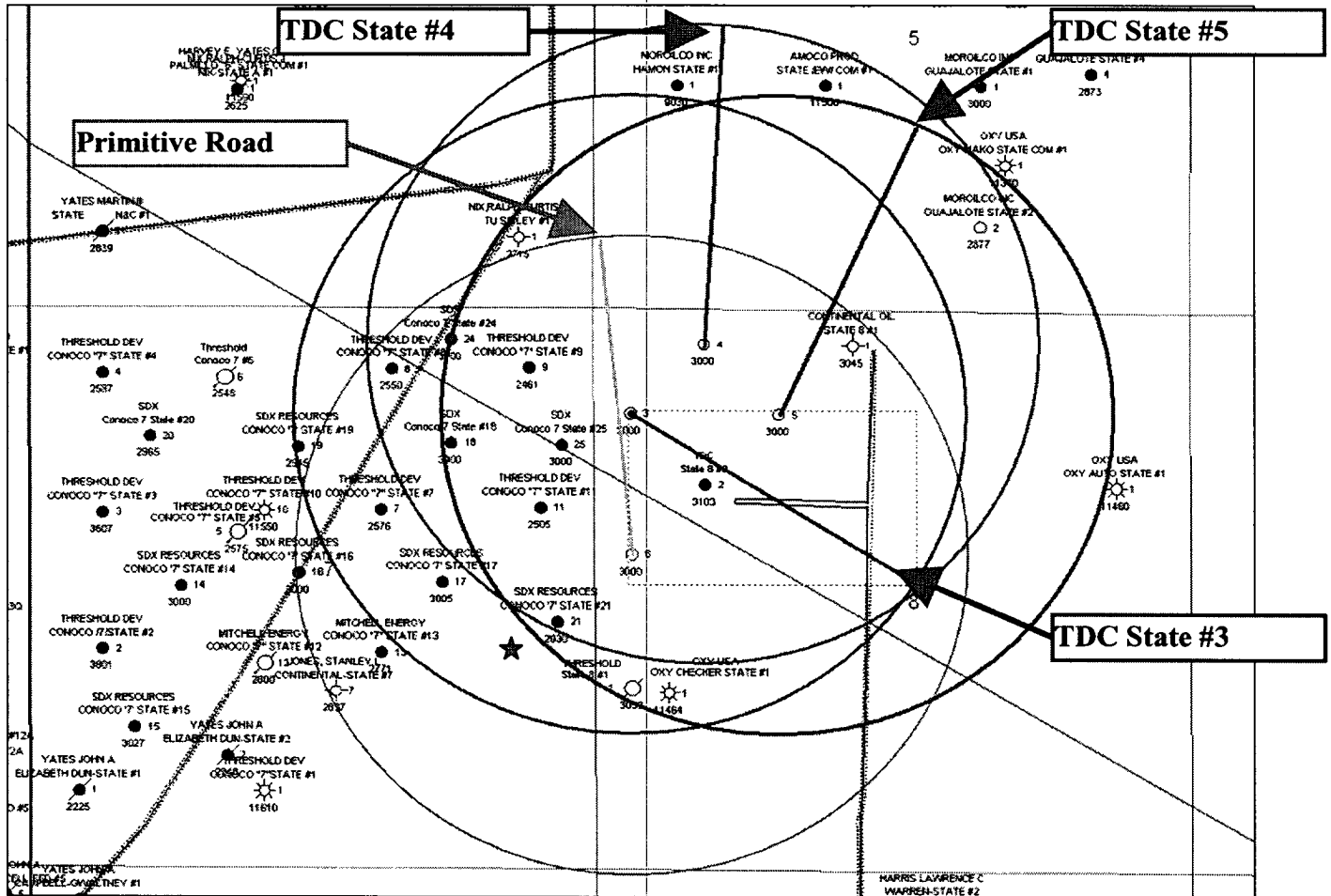
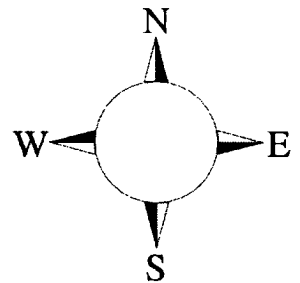
**Well # 6 2310' FNL & 330' FWL**

**Sec-35, T-19S R-29E**

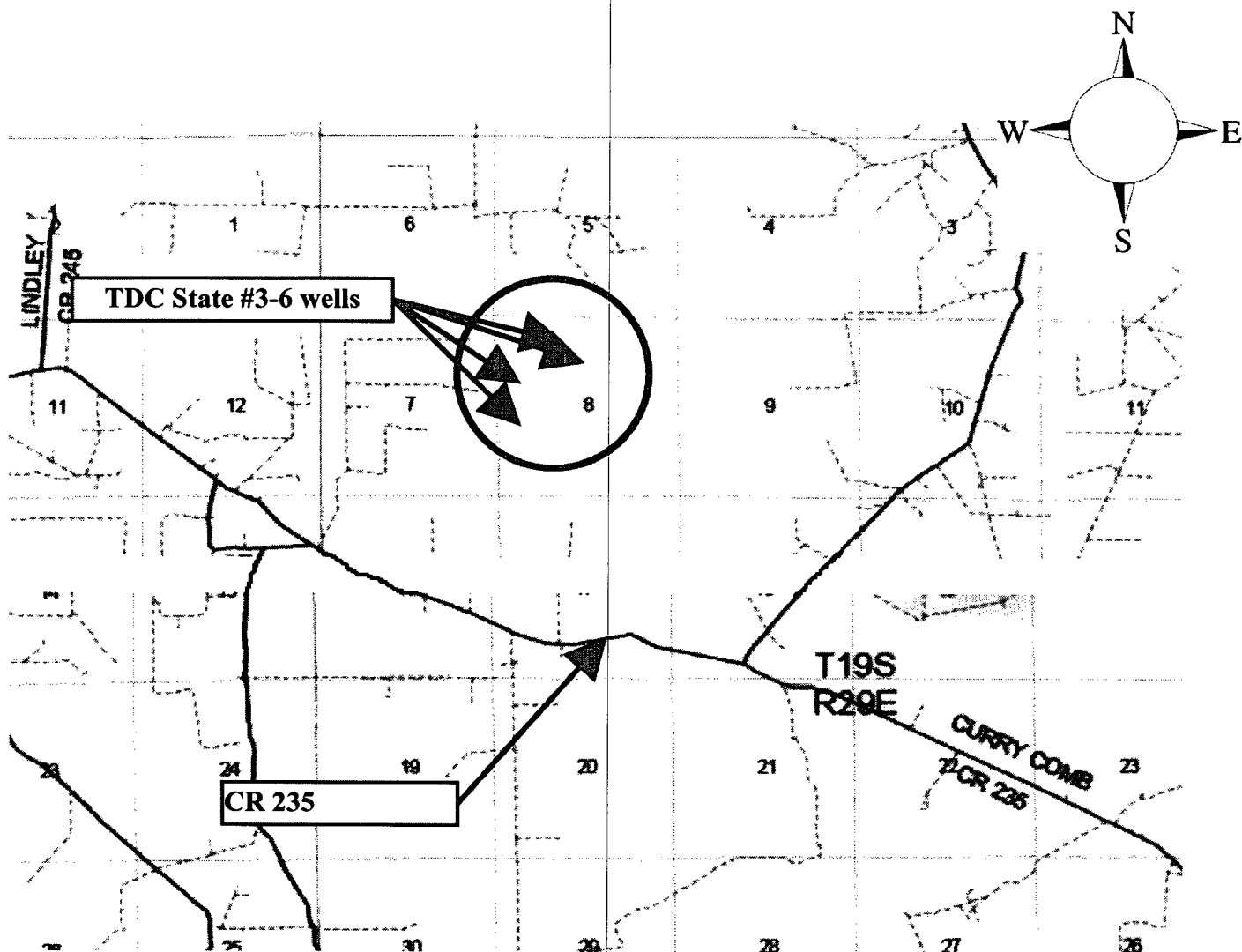
## Eddy County NM

## TDC STATE SECTION 8 Wells # 3-6

This is an open drilling site. H<sub>2</sub>S monitoring equipment and emergency response equipment will be used within 500' of zones known to contain H<sub>2</sub>S, including warning signs, wind indicators and H<sub>2</sub>S monitor.



Assumed 100 ppm ROE = 3000' (Radius of Exposure)  
 100 ppm H<sub>2</sub>S concentration shall trigger activation of this plan.  
 (ROE's are shown in purple, red, green and pink respective to the wellsite.)



## Escape

Crews shall escape upwind of escaping gas in the event of an emergency release of gas. Escape can be facilitated from lease road South or southwest on primitive road to county road 235. Drivers onto primitive road from all entrances and CR235 must be flagged and stopped so as to prevent traversing into a hazardous area. There are no homes or other buildings in or near the ROE.



## Emergency Procedures

In the case of a release of gas containing H<sub>2</sub>S, the first responder(s) must isolate the area and prevent entry by other persons into the 100 ppm ROE. Additionally the first responder(s) must evacuate any public places encompassed by the 100 ppm ROE. First responder(s) must take care not to injure themselves during this operation. Company and/or local officials must be contacted to aid in this operation. Evacuation of the public should be beyond the 100 ppm ROE.

All responders must have training in the detection of H<sub>2</sub>S, measures for protection against the gas, equipment used for protection and emergency response. Additionally, responders must be equipped with H<sub>2</sub>S monitors and air packs in order to control the release. Use the “buddy system” to ensure no injuries during the response.

## Ignition of Gas Source

Should control of the well be considered lost and ignition considered, take care to protect against exposure to Sulfur Dioxide (SO<sub>2</sub>). Intentional ignition must be coordinated with the NMOCD and local officials. Additionally the NM State Police may become involved. NM State Police shall be the Incident Command on scene of any major release. Take care to protect downwind whenever there is an ignition of the gas

## Characteristics of H<sub>2</sub>S and SO<sub>2</sub>

| Common Name      | Chemical Formula | Specific Gravity | Threshold Limit | Hazardous Limit | Lethal Concentration |
|------------------|------------------|------------------|-----------------|-----------------|----------------------|
| Hydrogen Sulfide | H <sub>2</sub> S | 1.189<br>Air = 1 | 10 ppm          | 100 ppm/hr      | 600 ppm              |
| Sulfur Dioxide   | SO <sub>2</sub>  | 2.21<br>Air = 1  | 2 ppm           | N/A             | 1000 ppm             |

## Contacting Authorities

Threshold Development Co. personnel must liaison with local and state agencies to ensure a proper response to a major release. Additionally, the OCD must be notified of the release as soon as possible but no later than 4 hours. Agencies will ask for information such as type and volume of release, wind direction, location of release, etc. Be prepared with all information available. The following call list of essential and potential responders has been prepared for use during a release. Threshold Development Co. response must be in coordination with the State of New Mexico’s ‘Hazardous Materials Emergency Response Plan’ (HMER)

## Threshold Development Co. Company Call List

Morris Keith, Operations Manager  
Office - 817-980-3088  
Cell - 817-980-3088  
Home - 254-785-2892

Ray Selby, Field Superentendant  
Cell - 505-631-5984  
Home - 505-396-7319

### Agency Call List

#### Eddy County (505)

##### **Artesia**

State Police .....746-2703  
City Police .....746-2703  
Sheriff's Office .....746-9888  
Ambulance .....911  
Fire Department .....746-2701  
LEPC (Local Emergency Planning Committee) .....746-2122  
NMOCD .....748-1283

##### **Carlsbad**

State Police .....885-3137  
City Police .....885-2111  
Sheriff's Office .....887-7551  
Ambulance .....911  
Fire Department .....885-2111  
LEPC (Local Emergency Planning Committee) .....887-3798  
US Bureau of Land Management .....887-6544

New Mexico Emergency Response Commission (Santa Fe) (505)476-9600  
24 HR .....(505) 827-9126  
National Emergency Response Center (Washington, DC) ...(800) 424-8802

##### **Other**

Boots & Coots IWC .....1-800-256-9688 or (281) 931-8884  
Cudd Pressure Control.....(915) 699-0139 or (915) 563-3356  
Halliburton .....(505) 746-2757  
B. J. Services.....(505) 746-3569

Flight For Life -4000 24th St, Lubbock, TX .....(806) 743-9911  
Aerocare -Rr 3 Box 49f, Lubbock, TX .....(806) 747-8923  
Med Flight Air Amb 2301 Yale Blvd SE #D3, Albuq, NM .....(505) 842-4433  
S B Air Med Svc 2505 Clark Carr Loop SE, Albuq, NM .....(505) 842-4949

Prepared in conjunction with  
Wade Rohloff of;

